RECENT DISCOVERIES IN THE NEW HAMPSHIRE FLORA

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Our field work in New Hampshire during the 1971 season consisted only of a few day-excursions, no real effort having been made to search for unusual plants. However, several discoveries were made of which the following are most significant.

Scirpus robustus Pursh. Saltmarsh at Adams Point, Durham, Strafford County, A. R. Hodgdon, G. Brooke, J. Wicks, et al., September 29, 1971 #19145. It is often true that several rare and local species may occur in close proximity. It happens that the halophytic composite Iva frutescens var oraria, previously reported from Durham (Hodgdon & Krochmal 1950), reaches its northeastern known limit of range, aside from its disjunct occurrence in Nova Scotia, within a stone's throw of the Bulrush. The ample size of the Scirpus colony shows that it must have been growing here for a long time. Thus it must have been overlooked by the senior author many times during the past twenty or thirty years, perhaps because attention was directed too much to the Iva. The nearest reported stations for Scirpus robustus are in Newbury and Cambridge, Massachusetts, making the Durham locality the initial record for New Hampshire and the first north of Massachusetts. It is a conspicuous tall sedge, leafy nearly to the inflorescence, with big ovoid spikelets of rich brown color, the plant in size somewhat resembling the also robust Scirpus maritimus var Fernaldi which, however, typically has elongated spikelets. In the herbarium of the New England Botanical Club there are specimens from coastal areas of southwestern Maine which have regularly been called S. maritimus var Fernaldi, but which have ovoid spikelets or otherwise approach S. robustus in some characteristics.

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Presumably the separation of these two taxa is not always an easy matter.

Pycnanthemum Torrei Benth. Southern slope of Jeremy Hill, Pelham, Rockingham County, A. R. Hodgdon and Frederic Steele, August 4, 1971 #19148. Jeremy Hill lies within a mile or two of the Massachusetts line. The southern slope where we found the Pycnanthemum has been known for a long time as a rich collecting area; many species of Desmodium and Lespedeza, Phryma leptostachya and other plants of interest grow along the road which extends upward on the slope into the woods. Arthur Stanley Pease collected there and his success in finding unusual species so far north led the senior author also to visit the place a number of years ago. It has been known as the northeastern known limit of range for Desmodium marilandicum (L.) DC., Lespedeza virginica (L.) Britton and Pycnanthemum incanum (L.) Michx. while at least ten other species are found on this slope that have not been reported in Maine. On our August visit we explored the rocky slope just above the road a little way into the woods and came upon a clump or two of a big mint with which we were unfamiliar but which we assumed to be a Pycnanthemum and which proved to be P. Torrei. The calyx-teeth of P. Torrei are acuminate and are about 1.5 mm long serving readily to separate it from P. verticillatum or P. virginianum. In addition the leaves are thin and membranaceous and the heads are few at the tips of somewhat elongated slender branches. The leaves of P. Torrei are considerably wider than those of P. tenuifolium. This is a somewhat remarkable extension of range all the way from New Haven County, Connecticut where there are two stations for it known in New England. It was collected in New Haven by C. H. Bissell and R. W. Woodward in August 1910 and in Cheshire also in New Haven County by E. B. Harger in August 1929. Specimens from these two localities are present in both the Gray and the New England Botanical Club Herbaria. It seems unlikely that this mint, being scarce even in southern Connecticut, has moved

to Jeremy Hill in recent times. On the other hand, it is surprising that it was overlooked by the botanists who have visited the area unless indeed their attentions were too much diverted by all the other interesting plants.

Lechea tenuifolia Michx. Along cleared trail to fire tower, Jeremy Hill, Pelham, A. R. Hodgdon and Frederic L. Steele #19146. Our success that August day, in finding a species of Pycnanthemum seemingly new to New Hampshire, encouraged the first author to assume that other significant species might also be discovered on Jeremy Hill. It was decided therefore to follow a trail upward to the fire tower. Plants of Viola pedata were scattered along the trail and higher up, where the trail widened into a cleared roadway there were plants of Hypoxis hirsuta in good flower. A few depauperate plants of the pinweed, Lechea tenuifolia were growing nearby. In 1879 Kate Furbish found this species in Wells, York County, Maine. In the Herbarium of the New England Botanical Club one can find this Wells specimen but none from New Hampshire. In the Gray Herbarium however, there are two specimens from New Hampshire both being F. W. Batchelder collections from Pelham, one from the Gumpas District, the other with no precise record of locality. It is likely then that ours is the first record from Jeremy Hill and since Batchelder's more recent collection was made in 1902, a contemporary communication about it may be justified to show that it still is to be found north of the Massachusetts line.

Another pinweed, Lechea villosa, is found on Jeremy Hill and indeed quite generally in townships close to the Massachusetts line in New Hampshire, Durham being a somewhat isolated outpost for it to the northeast.

^{&#}x27;It seems preferable to retain the binomial Lechea villosa of Elliot which is clearly typified and about which there is no question instead of the vague, poorly defined and dubious L. mucronata of Rafinesque who published several other names that might be interpreted as L. villosa and who demonstrated in his published study of the genus that he failed to understand the group.

Cyperus Houghtonii Torr. Sandy roadside by pond near Silver Lake, Hollis, Hillsboro County, A. R. Hodgdon and Frederic L. Steele, August 25, 1971 #19144. This rare species is not new to New Hampshire, having previously been collected in Bath and Hinsdale in the Connecticut Valley. Its distribution in New England is somewhat unusual, however, and therefore deserves comment. We found it growing along with Cyperus strigosus, Fimbristylis autumnalis, Bulbostylis capillaris and Panicum philadelphicum at the edge of a road near a small pond not far from Silver Lake in Hollis. It was difficult to sort out the depauperate plants of Cyperus from the other plants with which it grew, indicating that it may be more common in suitable situations, obscured at times by associated plants, than it now seems. Its New England range includes Winslow (Kennebec Valley), Maine where it was discovered by Ralph Bean on July 22, 1915, Bath and Hinsdale, New Hampshire, Chittenden and Rutland Counties in western Vermont and several scattered localities in Massachusetts, there being no records reported by Seymour (1969) from Connecticut and Rhode Island.

Specimens of the four principal species discussed in this article have been deposited in the herbaria of the University of New Hampshire and the New England Botanical Club.

LITERATURE CITED

Hodgdon, A. R. and Stanley Krochmal. 1950. Range — extensions and clarifications in New Hampshire. Rhodora 52: 162-163.

SEYMOUR, FRANK C. 1969. The Flora of New England. Charles E. Tuttle Co., Rutland, Vermont. 596 p.

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